

# GUJARAT TECHNOLOGICAL UNIVERSITY

6<sup>th</sup> Semester Civil Engineering – PDDC

## Syllabus for Mid Sem Exam

### **Subject Code & Name: X60601 - Construction Management and Economics**

- General - Construction Management
- Management Technique
- Network (Analysis) Technique
- Critical Path Method (CPM)
- Cost Optimisation
- Programme evaluation & review Technique (PERT)
- Equipment

### **Subject Code & Name: X60603 - Irrigation Engineering**

- General: Introduction, definition, necessity of irrigation, scope and benefits, ill effects of irrigation, irrigation development in India.
- Methods of Irrigation: Introduction, comparison of various irrigation methods viz. farm flooding, lift drip, sprinkler, micro irrigation methods like subsurface pitcher irrigation etc., irrigation rates, riparian rights, principles of assessing water rates.
- Earthen Dams: Types of earthen dams, details, causes of failure of earth dam, seepage line, flow net, stability analysis of slopes, seepage control, safety against piping, slope protections, design considerations in earthquake region, measures of safe drainage

### **Subject Code & Name: X60604 - Structural Design - I**

- Loads: Appraisal of loading standards such as I.S, I.R.C. Effect of wind and earthquake on structure
- Design of roof trusses: Various types of trusses and their selection in industrial structures, effect of wind & or other loads on trusses and structural detailing, monitored and knee braced trusses.
- Design of steel structures: Industrial building (rolled/tubular) including gantry girder, through and deck type bridges

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